

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1, 3-16 are pending in the application, with claims 1, 10, 12, and 13 being the independent claims. Claim 2 is sought to be cancelled without prejudice to or disclaimer of the subject matter recited therein. Claims 1, 3, and 6-13 are sought to be amended. Claims 14-16 are sought to be added. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Objection to the Specification

On page 2 of the Office Action, the specification was objected to because of informalities. Applicants have amended the specification accordingly. Applicants, therefore, respectfully request that the objection be withdrawn.

Objection to the Claims

On page 2 of the Office Action, claims 1 and 11-13 were objected to because of informalities. Claims 1 and 11-13 have been amended accordingly. Applicants, therefore, respectfully request that this Amendment be entered and the objection be withdrawn.

Rejections Under 35 U.S.C. § 102

On page 3 of the Office Action, claims 1 and 3-7 were rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by U.S. Patent No. 6,496,265 to Duncan *et al.* (hereinafter Duncan). Applicants respectfully traverse this rejection and request that they be withdrawn.

Claim 1, as amended, recites in part:

a diaphragm having a rigid outer portion and a displaceable semi-elastic inner portion that is sensitive to pressure changes in a range of approximately 0.1 to 0.5 inches of water, the inner portion displaces in response to a pressure difference between first and second sides of the diaphragm . . .

Technical differences exist between amended claim 1 and Duncan. Duncan describes a diaphragm milled from a single material to within 3.0 mm of a middle surface to form the diaphragm. Col. 9, lines 1-5. However, Duncan does not teach or suggest "a diaphragm having a rigid outer portion and a displaceable semi-elastic inner portion that is sensitive to pressure changes in a range of approximately 0.1 to 0.5 inches of water," as recited in claim 1. Accordingly, claim 1 is patentable over Duncan for at least these reasons.

Claims 3-7 depend on claim 1 and are thus patentable over Duncan for at least the reasons provided above. Applicants therefore respectfully request that the Examiner reconsider and withdraw the rejection of claims 1 and 3-7.

On page 4 of the Office Action, claim 10 was rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,953,388 to Barada (hereinafter Barada). Claims 10-13 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent

No. 4,550,592 to Deschape (hereinafter Deschape). Applicants respectfully traverse these rejections and request that they be withdrawn.

Claim 10, as amended, recites:

A proximity sensor for lithography, comprising:
a measurement leg having a measurement probe coupled thereto;
a reference leg having a reference probe coupled thereto;
a bridge portion coupled between the measurement leg and the
reference leg; and
a diaphragm pressure sensor disposed within the bridge portion.

Technical differences exist between amended claim 10 and Barada or Deschape.

Barada does not teach or suggest "a diaphragm pressure sensor disposed within the bridge portion," as recited in claim 10. Barada describes a hot wire mass flow sensor. *See* Col. 3, lines 1-2. Barada does not it teach or suggest "a diaphragm pressure sensor disposed within the bridge portion," as recited in claim 10. Accordingly, claim 10 is patentable over Barada for at least the reason provided above.

Deschape does not teach or suggest using a diaphragm pressure sensor in "[a] proximity sensor for lithography . . ." as recited in claim 10. Deschape is directed toward a "pneumatic gauging system . . . [that] takes the form of a single block . . . [having] a plurality of air flow channels . . . bored therethrough" For example, Deschape does not teach or suggest a proximity sensor for lithography having a measurement leg and a reference leg. Accordingly, claim 10 is patentable over Deschape for at least the reasons provided above.

Further, claims 12-13 are patentable over Deschape for at least the reasons provided with respect to claim 10. Claim 11 depends on claim 10 and is thus patentable over Deschape for at least the reasons provided above, and further view of its features.

Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 10-13.

Applicants respectfully submit that new claim 14 is patentable over Barada and Deschape for at least the reasons provided with respect to claim 10. Claims 15-24 depend on claim 14, and are thus patentable over Barada and Deschape, individually, for at least the reasons provided above, and further view of their own features. Applicants therefore respectfully request that the Examiner allow claims 14-24.

Rejections Under 35 U.S.C. § 103

On page 6 of the Office Action, the Examiner rejected claim 2 under 35 U.S.C. § 103(a) as being unpatentable over Deschape in view of Published U.S. Application No. 2004/0099060 to Kijlstra *et al.* (hereinafter Kijlstra). Claim 8 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Duncan in view of U.S. Patent No. 5,880,841 to Marron *et al.* (hereinafter Marron). Claim 9 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Deschape in view of U.S. Patent No. 6,105,436 to Lischer *et al.* (hereinafter Lischer). Applicants respectfully traverse these rejections with respect to claims 8 and 9. Claim 2 has been cancelled, therefore rendering its rejection moot.

Claim 8 depends from claim 1. The disclosure of Marron adds nothing to the disclosure of Duncan to overcome the deficiencies of the latter with respect to claim 1. Accordingly, claim 8 is patentable over Marron and Duncan, alone or in combination.

Technical differences exist between amended claim 1 and Deschape. Deschape does not teach or suggest "a diaphragm having a rigid outer portion and a displaceable semi-elastic inner portion that is sensitive to pressure changes in a range of

approximately 0.1 to 0.5 inches of water," as recited in claim 1. Nowhere in Deschape does it teach or suggest that the diagram is a semi-elastic material that is sensitive to pressure changes in a range of approximately 0.1 to 0.5 inches of water. Accordingly, claim 1 is patentable over Deschape for at least the reasons provided above. The disclosure of Lischer adds nothing to the disclosure of Deschape to overcome the deficiencies of the latter with respect to claim 1. Claim 9 depends from claim 1 and is thus patentable over Deschape and Lischer, alone or in combination, for at least the reasons provided above.

Applicants therefore request that the Examiner reconsider and withdraw the rejection of claims 8 and 9.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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Date: 11/15/05

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